

Date: Thursday, 4/12/2007 8:37:19 AM  
 User: Kim Johnston

## Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: 350 SKIDTUBE ASSEMBLY LH
Job Number	: 31679		
Estimate Number	: 10266		
P.O. Number	: <i>N/A</i>	Part Number	: D350636013
This Issue	: 4/12/2007	S.O. No.	: <i>N/A</i>
Prsht Rev.	: NC	Drawing Number	: D2750 UNDER REVIEW <i>CB</i>
First Issue	: <i>N/A</i>	Project Number	: <i>N/A</i>
Previous Run	: 31678	Drawing Revision	: D
		Material	: <i>N/A</i>
		Due Date	: 4/30/2007
Written By	: <i>[Signature]</i>	Qty:	1
Checked & Approved By	: <i>[Signature]</i>	Um:	Each
Comment	: Est Rev: H 02.09.25 Rearranged procedure steps KJ est rev I 06.03.30 Per rev. D dwg EC		

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description:
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1.0	DC	DOCUMENT CONTROL
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Comment: DOCUMENT CONTROL

Photocopy blue file and type labels per PPP D350-636-013 CHG 002

*KS 07-04-20*

2.0	D26003BENT	Extrusion Bent
-----	------------	----------------



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
1	D2600-3-Bent	Extrusion (Bent)	<i>1530666</i>

*R 07-05-07*

3.0	D2744	Fwd Cap
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Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Cap

Batch:

*B 29784**BE 07-05-09*

4.0	LANDING GEAR 1	LANDING GEAR RESOURCE 1
-----	----------------	-------------------------



Comment: LANDING GEAR RESOURCE 1

1- Mark cut line on aft end of D2600-3-Bent using Jig DT 8150. Cut to length as per Dwg D2750. Deburr end

2- Drill pilot holes as per Dwg D2750 sheet 3 (D2750-1 details). Drill using drill Jig DT8150 & DT8864 drilling holes labelled "B" only.

3- Mark fwd end for cutting using Drill Jig DT 8150 & DT8864 and cut as per dwg D2750.

*R 07-05-07*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Job Number: 31679

Part Number: D350636013

Job Number:



Seq. #:

Machine Or Operation:

Description:

4-Drill pilot holes for Detail B using DT8330

5-Open float holes to .375"

6-Drill pilot holes for wearplates as per Dwg D2750 using DT8108 and open to 0.250" \*\*\*Make sure that wearplate holes are on bottom of tube\*\*\*\*\*

7-Open up holes of Detail A to 0.250" (total of 2 holes per side)

8- Countersink all fwd wearshoe holes (total of 19 holes per side) DO NOT C'SINK THE LAST AFT HOLES (total of 2 per side for blade fitting) as per dwg D2750.

9-Countersink Detail A as per dwg D2750.

10-Open up holes for Detail B, "hole size W" and blade fitting location holes to 0.500" (total of 9 holes per side) as per dwg D2750.

11-Weld D2744 Cap as per Dwg D2750 and QSI 004. Fill grooves in bend left from bending as per QSI 004  
A/R Aluminum Rod *M102421 BE 07-05-09*

12-Grind welds flush as per Dwg D2750 *BE 07-05-22 (1)*

*12*  
*07/05/22*

5.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

*BE 07/05/22*

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

*DP 7-5-22*

7.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

*BE 07-05-22 (1)*

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

*BE 07-05-22 (1)*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 31679

Part Number: D350636013

Job Number:



Seq. #:

Machine Or Operation:

Description :

9.0

D2739

350 I Beam



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Web

Batch:

B32282 Pm 07-05-22 (1)

10.0

D34901

CROSS BOLT SPACER



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Crossbolt spacer

Batch:

B31075 BE 07-05-23

11.0

D34905

CROSS BOLT SPACER



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Crossbolt spacer

Batch:

B29870 BE 07-05-23

12.0

D2743

Crossbolt Spacer



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

Crossbolt Spacer

Batch:

B30448 BE 07-05-23

13.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Open up holes "size X" (total of 4 holes per side) as per dwg D2750 Pm 07-05-22 (1)  
2-Open up holes of Detail V & Detail C to 0.625" (total of 8 holes per side) as per dwg D2750. Pm 07-05-22 (1)

3-Chamfer holes of Detail V, Detail C, hole size "W" and "X" per dwg D2750 (welding instructions on sheet 5) Pm 07-05-22 (1)

4-Deburr and blow out all chips from inside of tube Pm 07-05-22 (1)

5-Bond web D2739 in place as per QSI 015

A/R

Sikaflex-291

batch: M103561

exp. date: 07-16-01

Pm 07-05-22 (1)

6- Weld spacers D3490-1, D3490-5 and D2743 as per dwg D2750 & QSI004

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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Job Number: 31679

Part Number: D350636013

Job Number:



Seq. #:

Machine Or Operation:

Description :

(welding instructions on sheet 5)

A/R

Aluminum Rod

batch:

*M 103794 BE 07-05-23*

7-Grind welds flush as per Dwg D2750

*fw 07-05-240*

8-Spot face ground handling holes section J-J (total of 4 places per side) as per dwg D2750

*fw 07-05-240*

9-Deburr holes

*fw 07-05-240*

14.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

*fw 07/05/29*

15.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

*fw 07-05-23*

16.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Gloss White (Ref. 4.3.5.1) as per Dart QSI 005 4.3

*fw 07/06/08 ①*

17.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

Inspect for foreign object per QSI 024

*M. 07/06/11 ②*

18.0

NAS1330S3KB166

INSERT



Comment: Qty.: 42.0000 Each(s)/Unit Total : 42.0000 Each(s)

INSERT

Batch: *M 102608*

*fw 07/06/11*

19.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Install inserts as per dwg D2750

*fw 07/06/11 ①*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 31679

Part Number: D350636013

Job Number:



Seq. #:	Machine Or Operation:	Description :
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20.0

QC5

INSPECT WORK TO CURRENT STEP



*0706-11 (U)*



Comment: INSPECT INSERTS

21.0

D26483

Wearpad



Comment: Qty.: 5.0000 Each(s)/Unit Total : 5.0000 Each(s)

Wearpad

Batch: *B30648*

22.0

D265613

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Wearplate

Batch: *B30553*

23.0

D265635

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Wearplate

Batch: *B30554*

24.0

D2746

Wearshoe



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Wearplate

Batch: *B32283*

25.0

D2745

Bushing



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

Bushing

Batch: *B30817*

26.0

D3488041

BLADE FITTING ASSEMBLY, LH



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Blade Fitting, LH

Batch: *B29432*

*FL 07/06/11 (U)*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Job Number: 31679

Part Number: D350636013

Job Number:



Seq. #:	Machine Or Operation:	Description :
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27.0	D3492041	PLUG ASSEMBLY
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Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)  
PLUG ASSEMBLY  
Batch: B29983

28.0	D3492045	PLUG ASSEMBLY
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Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)  
PLUG ASSEMBLY  
Batch: B30131

29.0	AN3C5A	Bolt
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Comment: Qty.: 38.0000 Each(s)/Unit Total : 38.0000 Each(s)  
Bolt  
Batch: m104118

30.0	AN3C6A	BOLT
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Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)  
Bolt  
Batch: m103693

31.0	AN3C7A	BOLT
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Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)  
BOLT  
Batch: m103668

32.0	AN6C44A	BOLT
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Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)  
BOLT  
Batch: m104605

33.0	AN8C35A	BOLT
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)  
BOLT  
Batch: m102180

Feb 02/06/11 ①

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 31679

Part Number: D350636013

Job Number:



Seq. #:	Machine Or Operation:	Description :
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34.0	AN960C10L	washer
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Comment: Qty.: 46.0000 Each(s)/Unit Total : 46.0000 Each(s)  
washer  
Batch: m102602

35.0	AN960C816L	WASHER
------	------------	--------



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)  
WASHER  
Batch: m104093

36.0	MS210436	NUT
------	----------	-----



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)  
NUT  
Batch: m103693

37.0	MS21083C8	NUT
------	-----------	-----



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)  
NUT  
Batch: m103492

38.0	NAS1515H3L	WASHER
------	------------	--------



Comment: Qty.: 46.0000 Each(s)/Unit Total : 46.0000 Each(s)  
WASHER  
Batch: m102535

39.0	NAS1515H8L	WASHER
------	------------	--------



Comment: Qty.: 10.0000 Each(s)/Unit Total : 10.0000 Each(s)  
WASHER  
Batch: m104260

FEH 07/06/11 ①

40.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
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Comment: HAND FINISHING RESOURCE #1

1-Spray inside of tube with "LPS-3" batch: m104161  
Inspect for foreign objects as Dart QSI 024

FEH 07/06/12 ①

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 31679

Part Number: D350636013

Job Number:



Seq. #:

Machine Or Operation:

Description :

2-Install blade fitting D3488-041, wearshoes and ground handling hardware as per dwg D2750  
SIKA FLEX 241  
BATCH: m103561  
EXP DATE: 07/10

*Feb 07/06/12*  
*①*

3-Coat all exposed fasteners with "LPS Procyon" batch: m104251

41.0

QC5

INSPECT WORK TO CURRENT STEP



*2006-12 ①*



Comment: INSPECT WORK TO CURRENT STEP

42.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1  
Pick Packing Kit

43.0

D2741

Blade



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)  
Blade  
Batch: B 30556 - ✓

44.0

AN960C816L

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)  
Washer  
Batch: M104093 - ✓

45.0

MS21083C8

NUT



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)  
Nut  
Batch: M104118 - ✓

46.0

AN8C21A

BOLT



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)  
Bolt  
Batch: M103547 1X - M104117 1X - 07/06/12 ①

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☒ No ☐ DQA: ☒ Date: 07/06/14

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Part Number: D350636013

Job Number:



Seq. #:

Machine Or Operation:

Description :

47.0

NAS1515H8L

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

WASHER

Batch: M104260 ✓

48.0

D34931

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

WASHER

Batch: B30662 - ✓

49.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

50.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Package as per PPP D350-636-013

51.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



✓ D. J. Delf

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

**DART****RELEASED**  
06.02.07**UNDER REVIEW**

07.02.05 CB

add gaskets  
change to SS wearplates

DESIGN PH	DRAWN BY AH	<b>DART AEROSPACE USA, INC.</b> PORT HADLOCK, WA	
CHECKED AH	APPROVED AH	DRAWING NO. D2750	REV. D SHEET 1 OF 5
DATE 06.01.05		TITLE 350 SKIDTUBE ASSEMBLY	SCALE NTS
A	98.04.16	NEW ISSUE	
B	98.09.01	CHANGE MS24694-S293 TO AN8-16A	
C	98.11.18	ADD D2750-3/D2750-4 INCORPORATE D2738 AND D2740	
D	06.01.05	ADD HOLES AND SPACERS FOR APICAL FLOATS INCORPORATE DEO 9133/9157	

Qty -041	Qty -042	Qty -043	Qty -044	Part Number	Description
X				D2750-041	SKIDTUBE ASSEMBLY, LH
	X			D2750-042	SKIDTUBE ASSEMBLY, RH
		X		D2750-043	SKIDTUBE ASSEMBLY, LH
			X	D2750-044	SKIDTUBE ASSEMBLY, RH
5	5	5	5	D2648-3	WEARPAD
1	1	1	1	D2656-13	WEARSHOE
1	1	1	1	D2656-35	WEARSHOE
1	1	1	1	D2746	WEARSHOE
1	1	1	1	D2739	WEB
1	1	1	1	D2741	BLADE
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1				D2750-1	SKIDTUBE WELDMENT, LH
	1			D2750-2	SKIDTUBE WELDMENT, RH
		1		D2750-3	SKIDTUBE WELDMENT, LH
			1	D2750-4	SKIDTUBE WELDMENT, RH
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
38	38	38	38	AN3C5A	BOLT
4	4	4	4	AN3C6A	BOLT
4	4	4	4	AN3C7A	BOLT
4	4	4	4	AN6C44A	BOLT
2	2	2	2	AN8C21A	BOLT
1	1	1	1	AN8C35A	BOLT
46	46	46	46	AN960C10L	WASHER
4	4	4	4	AN960C816L	WASHER
4	4	4	4	MS21043-6	NUT
3	3	3	3	MS21083C8	NUT
42	42	42	42	NAS1330S3KB166	INSERT
46	46	46	46	NAS1515H3L	WASHER
12	12	12	12	NAS1515H8L	WASHER

SHOP COPY  
RETURN TO  
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UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 31679

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**DART**

DESIGN PH	DRAWN BY PH	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED H	APPROVED H	DRAWING NO. D2750	REV. D SHEET 2 OF 5
DATE 06.01.05		TITLE 350 SKIDTUBE ASSEMBLY	SCALE NTS

**UNDER REVIEW**

07 09 05 CB

35 wearplates

OK  
CB**RELEASED**  
06 02 07 HGENERAL NOTES:

1. ALL DIMENSIONS ARE IN INCHES
2. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
3. MAKE FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
4. DAMAGE TOLERANCE ON BENDING:  
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 12 INCHES ABOVE THE GROUND. NO GOUGING IS ACCEPTABLE IN THE FLAT PORTION OF THE TUBE. GOUGES UP TO 0.020 ARE ACCEPTABLE IN THE BENT PORTION OF THE TUBE. TUBE O.D. SHOULD BE  $3.150 \pm 0.010$  IN THE FLAT PORTION OF THE TUBE. TUBE O.D. SHOULD BE  $3.15 \pm 0.030$  IN THE BENT PORTION OF THE TUBE.
5. ALL HOLES DRILLED ON CENTERLINES EXCEPT THOSE NOTED BY SECTIONS E-E, F-F, AND R-R.
6. WELDING TO BE DONE PER DART QSI 004.
7. FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:  
MINIMUM YIELD TENSILE STRENGTH = 35 ksi  
MINIMUM ULTIMATE TENSILE STRENGTH = 38 ksi
8. FINISH:  
ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.  
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
9. INSTALL NAS1330S3KB166 INSERTS AFTER FINISH AS INDICATED IN D2750-1/-2/-3/-4 WELDING DETAIL ON PAGE 4 AND 5. DRILL 'E' SIZE HOLES ( $\emptyset 0.250$ - $\emptyset 0.257$ ) FOR WEARSHOE INSERTS. C'SINK  $\emptyset 0.391 \times 100^\circ$  AND INSTALL INSERTS
10. D3488-041 (OR D3488-042) BLADE FITTING AND AN3-5A/AN3-7A WEARSHOE SCREWS TO BE INSTALLED USING SIKAFLEX-241 (OR EQUIVALENT) SEALANT.
11. SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
12. APPLY A LAYER OF SIKAFLEX -241/-291 ADHESIVE BETWEEN THE BOTTOM OF THE SKIDTUBE ASSEMBLY AND THE WEARPLATES

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UNDER REVIEW

OK CB

**D2750-041/-042 ASSEMBLY**  
D2750-041 SHOWN (D2750-042 OPPOSITE)

INSTALL NAS1330S3KB166  
INSERTS (4 PLACES)  
AFTER FINISH

BOND D2739 WEB INTO D2750-1 (OR D2750-2)  
OUTER TUBE WITH NON-STRUCTURAL  
SIKAFLEX-241 ADHESIVE PER DART QSI 015.  
NOTE: ENSURE THAT HOLES LINE UP.

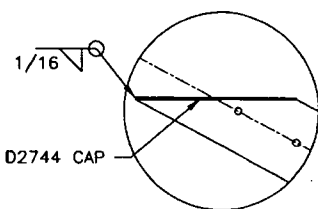
SEE DET. Q

DETAIL G

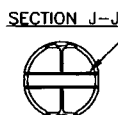
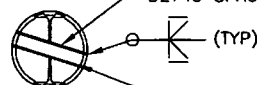
INSTALL NAS1330S3KB166  
WEARSHOE INSERTS (38 PLACES)  
AFTER FINISH

RELEASED

DETAIL G



SECTION H-H D2743 SPACER (REF)



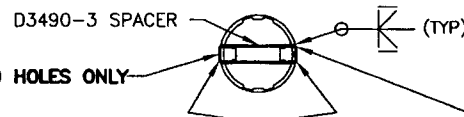
**WELDING INSTRUCTIONS**

1. CHAMFER HOLE 0.050 X 45°
2. INSERT D2743 SPACER
3. WELD INTO PLACE
4. GRIND FLUSH
5. DRILL OUT SPACER TO  $\phi 0.484$
6. SPOT FACE  $\phi 0.750$  (SECTION J-J ONLY)

$\phi 0.750$  HOLES ONLY

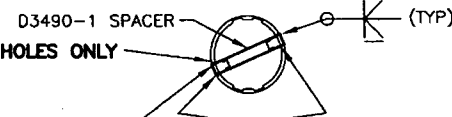
D3492-043 PLUG ASSEMBLY

SECTION L-L



$\phi 0.500$  HOLES ONLY

SECTION S-S



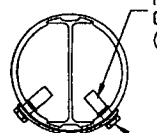
D3492-041 PLUG ASSEMBLY

**WELDING INSTRUCTIONS**

1. CHAMFER HOLE 0.050 X 45°
2. INSERT D3490-1 SPACER (4 PLACES) INTO  $\phi 0.500$  HOLES OR INSERT D3490-3 SPACER (4 PLACES) INTO  $\phi 0.750$  HOLES
3. WELD INTO PLACE
4. GRIND FLUSH
5. INSERT D3492-041 PLUG ASSEMBLY (8 PLACES) INTO D3490-1 SPACER OR INSERT D3492-043 PLUG ASSEMBLY (8 PLACES) INTO D3490-3 SPACER ON BOTH ENDS

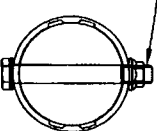
DETAIL K

USE AN3C7A BOLTS  
FOR INSTALLING AFT  
D2648-3 WEARPAD  
(4 PLACES)



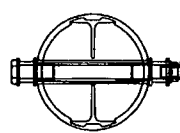
AN3C5A BOLT (1)  
AN960C10L WASHER (1)  
NAS1515H3L WASHER (1)  
(38 PLACES)

DETAIL P



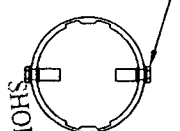
AN8C35A BOLT (1)  
AN960C10L WASHER (2)  
NAS1515H8L WASHER (2)  
MS21083C8 NUT (2)

DETAIL M



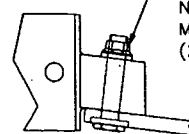
AN6-44A BOLT (1)  
D2745 BUSHING (2)  
NAS1515H8L WASHER (2)  
MS21043-6 NUT (1)  
(4 PLACES)  
NOTE: INSTALL WASHER BETWEEN  
SKIDTUBE AND BUSHING

DETAIL Q



AN3C6A BOLT (1)  
AN960C10L WASHER (1)  
NAS1515H3L WASHER (1)  
(4 PLACES)

DETAIL N



AN8C21A BOLT (1)  
AN960JD816L WASHER (1)  
NAS1515H8L WASHER (1)  
MS21083C8 NUT (1)  
(2 PLACES)

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DATE 06.01.05	TITLE 350 SKIDTUBE ASSEMBLY	REV. D SHEET 4 OF 5 SCALE 1:20

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UNDER REVIEW

01.02.05 CB

OK CB

SEE DET. Q

DETAIL G

INSTALL NAS1330S3KB166  
WEARSHOE INSERTS (38 PLACES)  
AFTER FINISH

RELEASED  
06.02.07.1

INSTALL NAS1330S3KB166  
INSERTS (4 PLACES)  
AFTER FINISH

**D2750-043/-044 ASSEMBLY**  
D2750-043 SHOWN (D2750-044 OPPOSITE)

BOND D2739 WEB INTO D2750-3 (OR D2750-4)  
OUTER TUBE WITH NON-STRUCTURAL  
SIKAFLEX-241 ADHESIVE PER DART QSI 015.  
NOTE: ENSURE THAT HOLES LINE UP.

SEE DET. P  
SEE DET. N

D3488-041  
(OR D3488-042)

D2741

BLACK ANTI-SKID

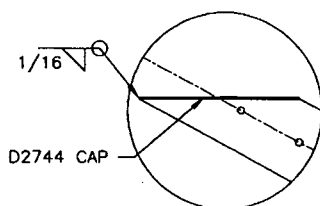
SEE DET. M

NO INSERT

WELDED SPACER  
NOT REQUIRED

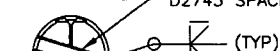
SEE DET. K

DETAIL G



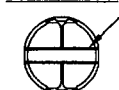
D2744 CAP

SECTION H-H



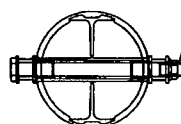
D2743 SPACER (REF)

SECTION J-J



- WELDING INSTRUCTIONS**
1. CHAMFER HOLE 0.050 X 45°
  2. INSERT D2743 SPACER
  3. WELD INTO PLACE
  4. GRIND FLUSH
  5. DRILL OUT SPACER TO Ø0.484
  6. SPOT FACE Ø0.750 (SECTION J-J ONLY)

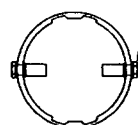
DETAIL M



AN6C44A BOLT (1)  
D2745 BUSHING (2)  
NAS1515H8L WASHER (2)  
MS21043-6 NUT (1)  
(4 PLACES)

**NOTE: INSTALL WASHER BETWEEN  
SKIDTUBE AND BUSHING**

DETAIL Q



AN3C6A BOLT (1)  
AN960C10L WASHER (1)  
NAS1515H3L WASHER (1)  
(4 PLACES)

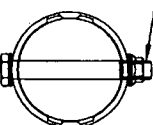
DETAIL K



USE AN3C7A BOLTS  
FOR INSTALLING AFT  
D2648-3 WEARPAD  
(4 PLACES)

AN3C5A BOLT (1)  
AN960C10L WASHER (1)  
NAS1515H3L WASHER (1)  
(38 PLACES)

DETAIL P



AN8C35A BOLT (1)  
AN960C10L WASHER (2)  
NAS1515H8L WASHER (2)  
MS21083C8 NUT (1)

SECTION T-T



D3490-1 SPACER

Ø0.500 HOLES ONLY

D3492-041 PLUG ASSEMBLY

SECTION U-U



D3490-5 SPACER

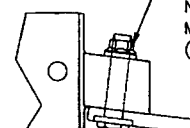
Ø0.313 HOLES ONLY

D3492-045 PLUG ASSEMBLY

**WELDING INSTRUCTIONS**

1. CHAMFER HOLE 0.050 X 45°
2. INSERT D3490-5 SPACER (4 PLACES) INTO Ø0.313 HOLES OR INSERT D3490-1 SPACER (4 PLACES) INTO Ø0.500 HOLES
3. WELD INTO PLACE
4. GRIND FLUSH
5. INSERT D3492-045 PLUG ASSEMBLY (8 PLACES) INTO D3490-5 SPACER OR INSERT D3492-041 PLUG ASSEMBLY (8 PLACES) INTO D3490-1 SPACER ON BOTH ENDS

DETAIL N



AN8C21A BOLT (1)  
AN960JD816L WASHER (1)  
NAS1515H8L WASHER (1)  
MS21083C8 NUT (1)  
(2 PLACES)

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NO. 109

AWS D17.1.2001  
QUALIFICATION TEST RECORD

Name Barclay Elliott  
Joint Welding Procedure Tig  
Part number and Job number A350636014 / B31622

TEST WELDS REQUIRED

BASE METAL Alum WELDING PROCESS Tig  
Penetration Complete ☐ Partial ☒ Single Weld ☒ Double Weld ☐  
Current AC ☒ DC ☐ Backing YES ☐ NO ☒

	Position	Vertical	Down <input type="checkbox"/>	Up <input type="checkbox"/>
Sheet Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	3G <input type="checkbox"/>	4G <input type="checkbox"/>
Tube Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	5G <input type="checkbox"/>	6G <input type="checkbox"/>
Sheet Fillet	1F <input type="checkbox"/>	2F <input type="checkbox"/>	3F <input type="checkbox"/>	4F <input type="checkbox"/>
Tube Fillet	1F <input type="checkbox"/>	2F <input type="checkbox"/>	4F <input type="checkbox"/>	5F <input type="checkbox"/>

Crossbolt Spacer Welded into Skidtube

TEST RESULTS

Visual Pass ☒ Fail ☐  
Penetration Pass ☒ Fail ☐  
Crossbolt Spacer Pass ☒ Fail ☐

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

Date of Test Coupon 07/05/23 Qualifier David Newell